Report North Cascades National Park Service Complex

■ 1.0 Site Description

The North Cascades National Park Service Complex encompasses Lake Chelan National Recreation Area (NRA), Ross Lake NRA, and North Cascades National Park (NP) (see Figure 1). The three park units were formed in 1968, with the enabling legislation calling for the three parks to be managed jointly by the NPS. According to its mission statement, the complex is "dedicated to conserving, unimpaired, the natural and cultural resources and values of [the three units] for the enjoyment, education, and inspiration of this and future generations."

Figure 1. Views of North Cascades National Park (Left), Lake Chelan National Recreation Area (Center), and Ross Lake National Recreation Area (Right)







The complex is located approximately 90 miles northeast of Seattle in the northern Cascade Range of Washington State (see Figure 2). Ninety-three percent of the complex is designated wilderness. The three units of the complex abut each other, and are surrounded by other wilderness areas that are managed by the U.S. Forest Service as well as the province of British Columbia. As shown in Figure 3, Ross Lake NRA occupies the northeastern boundary of the complex as well as a middle section along State Route 20 (SR-20). Ross Lake NRA essentially encompasses the Skagit River from the Canadian border to the western boundary of the complex. North Cascades NP lies north and south of Ross Lake NRA. Lake Chelan NRA is adjacent to the southern boundary of the NP. This NRA occupies the upper four miles of Lake Chelan as well as the headwaters of the Stehekin River.

Figure 2. Location of North Cascades National Park Service Complex

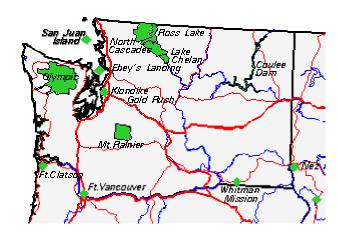


Figure 3. Local Area Detail for North Cascades National Park Service Complex



The NPS works with other government agencies to coordinate land management in the area. The U.S. Forest Service manages National Forest lands east and west of the complex. Seattle City Light operates three major dams and two town sites inside the complex boundary as part of its Skagit River Project. Also, the North Cascades Highway (SR-20), which provides the only direct road access to the complex, is a designated state scenic and

recreational highway. The Washington Parks and Recreation Commission works cooperatively with the Washington Department of Transportation to maintain and enhance scenic and recreational values within the state's highway right-of-way.

Management activities at the complex are organized around three different management areas that overlap boundaries of the three park units. The first area, which encompasses 93 percent of the land area of all three parks, is the Stephen Mather Wilderness Area. The second area encompasses recreational activities around the community of Stehekin in Lake Chelan NRA. The third area encompasses land within Ross Lake NRA that is most accessible to the North Cascades Highway corridor.

The wilderness area, which was created in 1988, encompasses about 630,000 acres out of a total of 2.7 million acres of wilderness area in the North Cascades Complex and adjacent U.S. Forest Service land. As designated wilderness, this area is intended for less intrusive recreational uses. The NPS staff noted that visitors to the wilderness area are interested in recreation activities such as mountain climbing, hiking, and backcountry camping. About 35,000 backcountry visitor nights were recorded in 1998, with many of these visitors using popular hiking areas such as the Pacific Crest Trail and the Cascade Pass Trail. Few people hike the road but many use the shuttles on the road to reach trailheads. Wilderness area visitors tend to travel in groups of three to four, although many professionally led groups of up to a dozen visitors hike through the area; groups of all sizes tend to stay in the backcountry about three to five days, on average. The overnight backcountry visitors are primarily from Washington State and have very well developed outdoor skills. Day use visitors to the wilderness area primarily come from the Seattle, Vancouver, and Bellingham areas west of the complex. These visitors tend to participate in hiking activities.

The Stehekin management area is wholly contained within the Lake Chelan NRA. Lake Chelan and the Stehekin area rest in a glacially carved valley in the Cascade Mountains. The lake is less than two miles wide at most points, but is 50 miles long. The community of Stehekin has about 100 year-round residents; this population grows to about 300 during the summer. The Stehekin area is only accessible via boat, floatplane, and airplane, as well as hiking and horseback during the summer. In this area, the most popular activities include boating, fishing, hiking, and backcountry camping, with most visitors spending multiple days in recreation activities. The majority of visitors arrive and leave by passenger ferry the same day. Others stay for multiple days. The Stehekin area is a popular entry and exit point for backcountry backpacking and mountain climbing. As with the wilderness area, the Stehekin area tends to draw visitors who are very experienced with outdoor recreation, and are very comfortable with multi-day backcountry excursions. However, the Stehekin area suffers from a lack of permanent visitor transportation facilities at the ferry landing, despite the fact that approximately 98 percent of visitors to the area come by ferry. In the summer, three daily ferries, the largest carrying as many as 350 passengers, call at Stehekin. There are no orientation facilities for disembarking passengers, resulting in confusion as tourists, the postman, and local residents carry baggage and supplies down the ramp and seek ground transportation. For departing visitors, there are no covered waiting areas or restrooms at the landing. The landing point itself is not fixed; it moves 300 to 500 feet up and down the shoreline depending on the water level of the lake, which varies by as much as 18 feet annually.

The Ross Lake management area is the most readily accessible and most visited portion of the complex. This management area spans both sides of SR-20, as well as the lower portions of Ross Lake. SR-20, which was completed through the area in 1972, is open only between mid-April and mid-November, on the average, due to heavy winter snowfall. Ross Lake is the most popular destination within this area, with many visitors enjoying boating, fishing, camping, rafting, and wildlife observation throughout the management area.

North Cascades NP spans about 505,000 acres. In 1998, it had about 33,000 visitors, 95 percent of which arrived between June and September. Ross Lake NRA spans about 118,000 acres. In 1998, it had about 425,000 visitors, 80 percent of whom arrived from June to September. Lake Chelan NRA spans about 62,000 acres. Out of its total of 46,000 visitors in 1998, about 70 percent arrived between June and September. All three units are open year-round, but access to the different units is greatly limited in winter due to heavy snowfall.

The NPS maintains visitor facilities throughout the complex area. There is a major Visitor Center in the Newhalem area along SR-20; this facility is open daily from April to November, and on weekends at other times. Staffed information centers are jointly managed with the U.S. Forest Service at Chelan, Glacier, and Sedro-Woolley. The NPS manages the Wilderness Information Center at Marblemount and the Golden West Visitor Center at Stehekin. The U.S. Forest Service and National Park Service jointly support a contractor-staffed information area at Field's Point on Lake Chelan, a principal embarkation point for Stehekin.

An NPS concessionaire operates the Ross Lake Lodge within the Ross Lake NRA. This facility is only accessible via trail and water routes, with the concessionaire operating a portage service for boat access to Ross Lake. A different NPS concessionaire runs a restaurant, general store, and the North Cascades Stehekin Lodge in the town of Stehekin. The town of Stehekin also has privately run lodging, dining and commercial services that are targeted at NRA visitors.

Seattle City Light maintains three hydroelectric plants and reservoirs (Gorge Lake, Diablo Lake, and Ross Lake) on the Skagit River. All three facilities are wholly within Ross Lake NRA. They offer tours of the Ross Dam Powerhouse and a boat tour on Diablo Lake.

The North Cascades complex has three National Historic Districts, 49 National Register structures and sites, and over 250 archaeological sites. The NPS maintains 386 miles of hiking trails throughout the complex. Camping opportunities are also plentiful in the complex, with three campgrounds along SR-20, 22 boat-in camp areas in Ross Lake NRA, and dozens of other primitive camping areas throughout the wilderness and Stehekin areas.

The NPS' most recent General Management Plan (GMP) for the complex calls for an emphasis on "helping people enjoy their natural surrounding free from the distractions of mechanized equipment and imposing structures." Towards that end, the GMP excludes any new roads, tramways, or other major visitor facilities other than a new residential environmental education center in the Ross Lake NRA unit. The GMP did propose renovation and slight expansion of existing lodging and camping locations within the complex. As expressed in the GMP, more developed recreational opportunities are available at other park sites in the region.

Within the Ross Lake NRA, a new licensing agreement for the three hydroelectric plants operated by Seattle City Light will provide over \$100 million in conservation funding over the next 30 years. This money is earmarked for projects in the areas of fisheries, recreation, wildlife protection, erosion control, and cultural resources. This agreement will be a major funding source for the Environmental Education Center, the only major new facility proposed in the 1988 GMP.

■ 2.0 Existing Transportation Services

The North Cascades Highway (SR-20) is the primary access route into the complex. The NPS estimates that over 90 percent of visitors to the complex stay within the corridor. Other than SR-542, which provides access from Bellingham into the northwest corner of the NP, SR-20 is the only highway route into the complex from the U.S. Ross Lake is only accessible by private vehicle via a gravel road that originates in Canada. As mentioned earlier, the Stehekin Valley is only accessible via boat, float plane or air from the town of Chelan. Both Ross Lake and the Stehekin Valley are also accessible via hiking trails and horseback during summer months. Bicycles, motorized, and mechanized vehicles are prohibited on all park trails.

The nearest town for major intercity passenger services is Mount Vernon. At this location, park visitors have access to Amtrak and intercity bus. However, there is no coordinated transit service from Mount Vernon into the park complex. Skagit County operates one transit trip per day from Mount Vernon into the Ross Lake NRA area along SR-20. This service is subsidized by Seattle City Light, and is heavily used by the utility's employees to access its facilities and towns along the corridor. Currently, there is concern that this transit service may be eliminated due to recent changes in transportation funding in Washington State.

Only two roads penetrate the wilderness areas of the complex. The Cascade River Road starts at Marblemount on SR-20 in U.S. Forest Service land west of the North Cascades complex. It runs for 22 miles as a narrow gravel road, providing the only vehicle access to a high mountain trailhead in the NPS complex. From the end of this road, it is an 11-mile hike into the Stehekin Valley. During peak times in the summer, this road is relatively well used, with the parking area at the end of the road nearing capacity.

SVR stretches 24 miles north from the community of Stehekin. The first four miles of SVR are paved, while the next seven miles are a maintained 14-foot-wide gravel road. The remaining 13 miles of road are narrow, gravel, and largely unmaintained. While vehicle travel is allowed in Stehekin and on SVR, visitors to the area do not use private vehicles since they must barge the vehicle up the lake and the road is rather rugged. Some private accommodations in Stehekin provide a vehicle to their customers who rent the particular cabins or rooms for use while they are in Stehekin.

The NPS and a private concessionaire each operate a shuttle service along SVR. For a part of the fall and spring, the NPS operates from Stehekin Landing as far up the road as it is open. During the main season, it operates from High Bridge up the road, with a private

company operating under a permit with the NPS providing shuttle service from Stehekin Landing to High Bridge. The shuttle is geared towards backcountry hikers and mountain climbers coming to/from Stehekin. SVR has been closed north of Glory Mountain (milepost 21) since 1995 due to changes in the Stehekin River channel caused by flooding. Between 1989 and 1993, the NPS operated the shuttle service for the full distance. Beginning in 1993, a private concessionaire took over shuttle operations between Stehekin Landing and High Bridge (milepost 11 on SVR) during the summer. The NPS continues to operate the shuttle between High Bridge and Glory Mountain during the summer, as well as the full route during shoulder season.

During summer months, four round-trips per day are operated in the lower portion of the valley (between Stehekin and High Bridge), and three round-trips per day are operated by the NPS north of High Bridge. On summer weekends, the NPS operates an additional "early bird" shuttle for the full route. During shoulder season, the NPS operates two shuttles per day along the full route length. At times during shoulder season, full access is not available north of High Bridge due to snow or flooding.

The NPS operates its shuttle using two 15-passenger vans that are leased from the General Services Administration. Although not required, the NPS recommends advance reservations for its shuttle service. The concessionaire owns and operates a 30-passenger bus for the lower valley shuttle; reservations are not accepted for this shuttle. The fare on either shuttle is \$6.00 per person between Stehekin and High Bridge; there is an additional \$6.00 per person fare for the NPS shuttle north of High Bridge. Ridership has varied on the NPS shuttle over the years due to flood and/or fire restrictions that have been in place at certain times. In fiscal year 1999, the NPS shuttle had 2,142 riders. The shuttle generated \$11,238 in revenue, with \$40,361 in expenses; the service was subsidized from the complex's base budget. Although precise revenue figures are not available for the private concessionaire, the NPS staff believes that the service at least "breaks even."

■ 3.0 ATS Needs

The NPS staff expressed interest in three improvements to Alternative Transportation Systems (ATS) services for the complex. First, they would like to improve the visitor transportation facilities at the ferry landing at Stehekin, used by over 50,000 visitors each year. NPS staff favor constructing a floating dock that would rise and fall with the lake level. This would eliminate both the need for passengers to embark and disembark by ramp, and for the landing point to move back and forth along the shoreline as the water level changes. The dock would accommodate four ferries and would bring visitors to a shelter to be built near the landing, where restrooms and information regarding transportation alternatives in Stehekin would be available.

Second, NPS staff would be interested in allowing the private concessionaire to operate the full shuttle service within the Stehekin Valley. In order to make this plan financially feasible, the NPS staff estimate that they would need to absorb the capital cost of a "heavy duty" 15-passenger van that the concessionaire could then use.

Third, the NPS staff is interested in seeing increased local transit service to the complex from Mt. Vernon, particularly on weekends. This transit service would provide access to the complex for the NPS and U.S. Forest Service employees, residents of local towns, and out-of-town visitors who use Amtrak or Greyhound. Furthermore, the transit service could provide shuttle service between the many trailheads and other day use facilities along SR-20. Although detailed planning has not been done, the NPS staff estimates that an early morning, late afternoon, and at least two midday runs would be needed to provide adequate access and circulation. The shuttle could either be provided by contracting with a current service provider in the area (e.g., Skagit County), or purchasing a small bus and operating it with the NPS staff or a private concessionaire.

■ 4.0 Basis of ATS Needs

Two very distinct groups visit the North Cascades complex. The first group consists of highly experienced backcountry hikers and climbers who tend to visit the wilderness areas for several days at a time; this group frequently enters and exits the wilderness from different trailheads and hence could benefit from shuttles that would serve the trailheads along SR-20. Based on informal feedback from some backcountry visitors, the NPS staff believes that some of these individuals use Amtrak and Greyhound services to reach Mount Vernon.

The second group of **current and potential** visitors consists of local and regional day visitors that are drawn to recreational opportunities along SR-20. While current visitors within this group would likely continue to rely on personal vehicles unless significant changes in cost or congestion were encountered, the NPS staff indicated that there may be an untapped market of visitors from local towns who would use a transit service. Many of these local visitors are low-income, migratory farm workers who do not have access to a private vehicle and hence cannot currently reach the NPS complex.

For the Stehekin Valley shuttle, the NPS staff suspects that a single operator could better coordinate and market the service throughout the valley. One major benefit of a single operator would be an ability to have a single annual pass that could be more attractive to frequent visitors and residents of Stehekin; a well-priced pass might discourage some of these individuals from operating private vehicles on SVR. The NPS staff is very interested in purchasing some type of large off-road vehicle with heavy-duty suspension that could operate on alternative fuel. Due to air quality concerns in Stehekin Valley, the NPS is investigating the use of photovoltaic electricity generation to replace the current hydroelectric and diesel generators in Stehekin.

In regard to the proposed Stehekin ferry landing, the facility would meet ADA universal access standards, making it possible for mobility-challenged visitors to more easily visit Lake Chelan NRA. It would also eliminate much of the confusion experienced by first-time visitors to the region by providing orientation displays and information about local transportation options. Lastly, it would provide more comfortable surroundings for visitors waiting to depart Stehekin.

■ 5.0 Bibliography

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■ 6.0 Persons Interviewed

Bill Paleck, Superintendent, North Cascades National Park Service Complex

Tim Manns, Chief Interpreter, North Cascades National Park Service Complex

Tom Belcher, Facilities Manager, North Cascades National Park Service Complex, January 10, 2001